



## **2008 CONSTRUCTION STORMWATER CONFERENCE**

APRIL 15 – 16, 2008  
FARGO, NORTH DAKOTA  
RAMADA PLAZA SUITES & CONVENTION CENTER

Supported by:



# Tuesday, April 15<sup>th</sup>, 2008

## Elements of Erosion /Sediment Control for Design and Construction

*Presented by Leo Holm, PE and Jennifer Hildebrand, CPESC, CPSWQ, of Resource Professionals Alliance.*

7:30 am	Registration
8:00 am	Opening Remarks
8:10 am	Why Permitting for Erosion Sediment Control? Effects of sediment in water resources Storm water runoff contaminants Clean Water Act
9:00 am	Audience Goals for workshop Input from Audience Desired topics/information
9:15 am	Overview of Storm Water Pollution Prevention Plans for Projects Purpose of SWPPP Design requirements Content of SWPPP SWPPP provisions SWPPP implementation
10:00 am	Break
10:30 am	Elements of Risk Analysis for Design and BMP Selection Erosion Control to reduce risk Probability of Success of two year design verses 10 year of BMPs Predicting Performance of BMPS
11:15 am	Sediment Control BMPS Silt Fence Design Perimeter control options Rock logs, Filter logs Inlet protection Ditch checks
12:00 pm	Lunch ( <i>Bag Lunch Provided</i> )
1:00 pm	Permanent and Temporary Erosion Control BMPs Topsoiling/Cat tracking Mulches Hydromulch Blankets Bonded Fiber Matrix Temporary stabilization/temporary provisions Biorolls/wattles Rock checks/weepers

## **Tuesday, April 15<sup>th</sup>, 2008**

- 1:45 pm      Miscellaneous Items  
                 Dewatering protection  
                 Street sweeping  
                 Entrance protection measures  
                 Flocculants
- 2:15 pm      Break
- 2:40 pm      Designing Storm Water Pollution Plans for Residential Construction  
                 Contents of the Plan  
                 Erosion Control Items  
                 Mass Grading  
                 Individual lots  
                 Class example Part I
- 3:30 pm      Narrative part of the SWPPP  
                 Special conditions and provisions  
                 Staging  
                 SWPPP implementation  
                 Plan notes/tabulations.  
                 Examples
- 4:00 pm      Design Examples  
                 Class Discussion  
                 SWPPP Examples part II  
                 Example SWPPP's

## **Wednesday, April 16<sup>th</sup>, 2008**

- 7:30 am      Registration (for those who haven't yet)
- 8:00 am      Dewatering and Mining Permits  
                 *Dallas Grossman*  
                 *ND Department of Health, Division of Water Quality*
- 8:30 am      New DRAFT Storm Water Pollution Prevention Plan Template  
                 *Dallas Grossman*  
                 *ND Department of Health, Division of Water Quality*
- 9:30 am      New Larger Common Plan of Development Permitting Process  
                 *Dallas Grossman*  
                 *ND Department of Health, Division of Water Quality*
- 10:00 am      Break
- 10:15 am      2008 Proposed Changes to the NPDES General Stormwater Permit For Construction Activity  
                 *Joyce Cieluch,*  
                 *Minnesota Pollution Control Agency*

10:45 am	Winter Stabilization of Sites <i>Leo Holm, P.E.</i> <i>Resource Professionals Alliance</i>
11:15 am	Basics of Dust Control and Wind Erosion <i>Dallas Grossman</i> <i>ND Department of Health, Division of Water Quality</i>
12:00 pm	Lunch ( <i>Bag Lunch Provided</i> )
1:00 pm	Storm Water Management & Erosion Control in West Fargo <i>Chad Zander</i> <i>City of West Fargo</i>
1:30 pm	Fargo Stormwater Management 2008 <i>Steve Sly</i> <i>City of Fargo</i>
2:00 pm	City of Moorhead Stormwater Pollution Prevention Program <i>Andrea Crabtree</i> <i>City of Moorhead</i>
2:30 pm	Break
2:40 pm	Risk Analysis for Selecting BMPS and Making Site Decisions <i>Leo Holm, P.E.</i> <i>Resource Professionals Alliance</i>
3:10	BMP Ideas, Issues and Solutions – Open Discussion <i>Dallas Grossman</i> <i>ND Department of Health, Division of Water Quality</i>
3:30 pm	Questions

## Biographies

*Joyce Cieluch*  
*Minnesota Pollution Control Agency*

Joyce has worked for the Minnesota Pollution Control Agency for 10 years. For the past 6 years she has served on the design team for phase II of both the Construction and the Municipal stormwater programs. She's also been involved in compliance and enforcement of the construction permit rules and regulations. More recently she has been performing technical review and approval of Municipal stormwater permits.

*Andrea Crabtree*  
*Environmental and Regulatory Compliance Manager*  
*City of Moorhead*

Andrea is an Environmental and Regulatory Compliance Manager for the City of Moorhead. Andrea has been with the city for two and a half years working on the Stormwater Pollution Prevention Program. She earned a Bachelor of Science Degree in Civil Engineering from North Dakota State University in December of 2000.

*Dallas Grossman*  
*Environmental Engineer*  
*North Dakota Department of Health, Division of Water Quality*

Dallas has been with the North Dakota Department of Health, Division of Water Quality since July of 2004. He is part of the North Dakota Pollutant Discharge Elimination System Program and works mostly with the Stormwater Program. He is a graduate of North Dakota State University with a Bachelor of Science degree in Civil Engineering.

*Jennifer Hildebrand, CPESC, CPSWQ*  
*National Storm Water Manager*  
*Weis Builders, MN*

Jennifer Hildebrand has been involved in the erosion and sediment industry for over 17 years. She is also a licensed and Certified Professional in Erosion and Sediment Control (#1712), and a licensed and Certified Professional in Stormwater Quality (#134). Currently employed by Weis Builders, Jennifer's experience and industry involvement allow Weis Builders to deliver excellence in storm water compliance to their commercial construction clients. Her specialties include compliance issues, inspection programs, program design, and site plan reviews. Her involvement in the construction industry has provided her with experience in a wide variety of erosion and sediment control products and services. As a result, Jennifer has developed a selection of technologies that involve several methods of hydraulic application techniques and biotechnical stabilization practices throughout the Midwest United States and Canada. This private industry experience and public representation experience provides opportunities for facilitation of appropriate erosion, sediment, and stormwater control programs and techniques.

Jennifer is the Administrative Vice Chair for CPESC, Inc. and previous Vice President of the Northern Plains Chapter of the International Erosion Control Association. She is the Executive Director for the Vegetation Management Association of Minnesota, and former director of the Minnesota Association of County Agricultural Inspectors, treasurer for the Minnesota Erosion Control Association, and involved with several other industry based non-profit organizations. Jennifer has gained valuable insight into the realities of land development, commerce, and environmental impacts in the erosion and sediment control industry as a result of her involvement with these non-profit entities, as well as the private sector of this business. Among these organizations she has given numerous presentations on proper management practices, installation techniques, educational day-long programs on erosion and sediment control programs, along with numerous product presentations. Her presentations and classes have been conducted in Idaho, Indiana, New Mexico, California, Nevada, Kentucky, North Carolina, Colorado, New York, Texas, Alberta, British Columbia, and Manitoba. She has spoken and presented materials at multiple government agencies and Departments of Transportation. She has been a part of specifications and standards development for Wisconsin, Iowa, Minnesota, North and South Dakota, and Manitoba. Among many state and public institutions, her reputation is highly regarded within this industry. She has made it her goal to educate and inform the public and private sector markets regarding erosion control principles and proper installation techniques.

[JenniferHildebrand@WeisBuilders.com](mailto:JenniferHildebrand@WeisBuilders.com)

*Leo Holm, P.E.*  
*Resource Professional Alliance*

Leo Holm is a registered professional engineer. He is a graduate of the University of Minnesota, Department of Biosystems and Agricultural Engineering specializing in Soil and Water Conservation Engineering. Leo retired after a 37 year career at the Minnesota Department of Transportation. (Mn/Dot). At Mn/Dot he managed a Section comprised of Natural Resource Professionals and Engineers. Mr. Holm is currently President of the Resource Professional Alliance and is past president of the Minnesota Erosion Control Association (1993-1999). He is responsible for setting Mn/Dot Standards and Specifications for controlling erosion on highly disturbed sites and is known as an expert and authority in controlling erosion. Presently he has an adjunct faculty position with the University of Minnesota and is on the Department Advisory Committee, University of Minnesota Department of Biosystems and Agricultural Engineering.

Throughout his career, Mr. Holm has provided solutions to many erosion problems and has conducted numerous training workshops. He has been a frequent host and speaker at symposiums and conferences at state and national levels. In 2002 he initiated the State of Minnesota erosion certification training program. This program provides training for Designing Storm Water Pollution Prevention Plans and managing storm water on construction projects. In 2007 he assisted the South Dakota DOT in establishing an erosion control certification program. He has written several articles which have published in Land and Water magazine. His most recent article SWPPP Soup Does Anyone Have a Good Recipe? was recently published. He has received several awards over his career; including Outstanding Contributions to Environmental Protection Award 2006, Minnesota Pollution Control Agency, Outstanding Contributions to Education and Research In Erosion Control 2006, University of Minnesota, and Distinguished Service Award Mn/Dot Certification Program 2006, Minnesota Department of Transportation.

*Steve Sly*  
*Stormwater Technician*  
*City of Fargo*

Steve has 25 years administrative and management experience in local, state & federal government. Specifically: project management, field inspection, scope of work issues and agency program administration. His formal education includes a BS - Business Administration, MLA Liberal Arts, with course work and specialized training in floodplain management. He is a Certified Floodplain Manager with expertise in flood mitigation and recovery operations.

Since 2004 Steve has served as stormwater technician for the City of Fargo Engineering Department. His responsibilities include local floodplain programming and EPA Phase II stormwater compliance.

*Chad Zander*  
*Public Works Foreman*  
*City of West Fargo*

Chad graduated from NDSU in 2005 with degrees in Landscape Architecture (with an emphasis in Natural Resource Management) and B.S. in Environmental Design. He started working for the City of West Fargo Public Works Department in 2006. His current duties as the Public Works Foreman include storm water management, construction inspections, permitting, the sump pump program, excavations and other public works projects.